NIEHS
National Institute of Environmental Health Sciences

Telecommuting IT Resource Training

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Windows Telecommuting

Windows Telecommuting

NIEHS Desktop support offers some Telecommuting information at this URL:
http://www.niehs.nih.gov/lsp/userguid/telecom/pc/pcvpnhub.htm

Citrix Objectives

The telecommuter will be able to:

- Log on and off a Citrix session
- Navigate the Network Neighborhood to locate your office computer or a server
- Navigate and identify drives, files and documents on your office computer or server
- Use the standard programs included in the Citrix environment to locate, open, modify, create or save a file.
- Transfer files between the office PC and telecommuting PC
- Print a document to the local computer

What is a Citrix Session?

We begin with a physical separation between two computers

Telecommuting   **Office**

Problem:
   a. Slow
   b. Must work with separate versions of document on each computer
   c. No advantage of central storage.
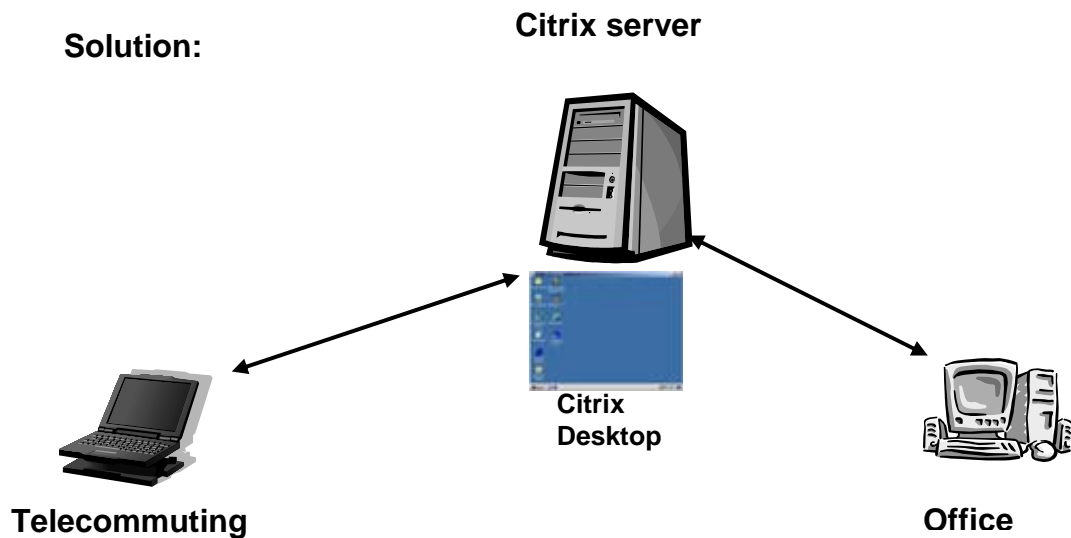
Windows Telecommuting

Solution:

Citrix server

Citrix Desktop

Telecommuting

Office

The Citrix Server has its own **desktop** it will assign to you.

When you log on from either location the Citrix server will show you this desktop.

Citrix server

Citrix Desktop

Telecommuting
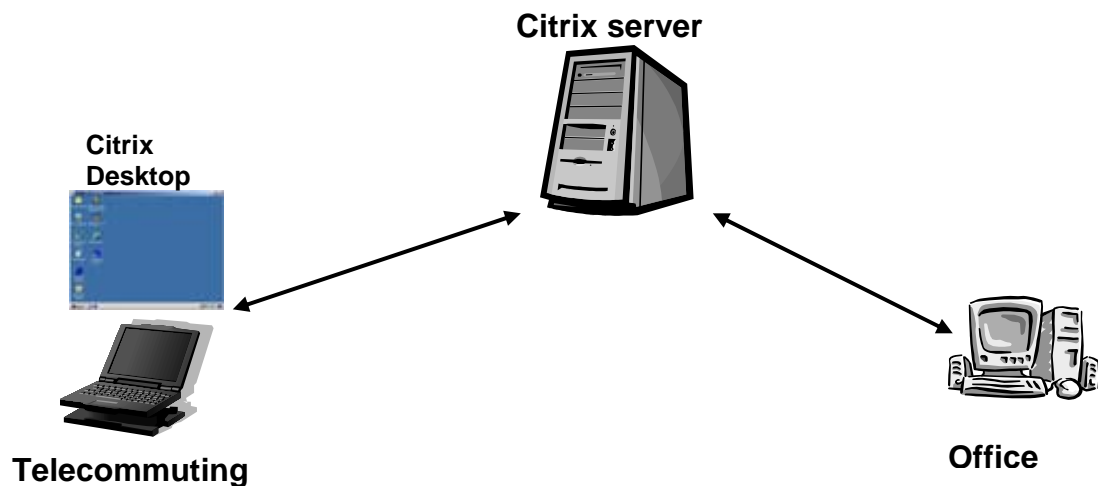
Office

Here is an example of what a Citrix session looks like.

The **Citrix Window** appears on your desktop.

The Citrix server creates this desktop. It is not your office computer nor is it the telecommuting computer

This Citrix server remembers you and allows you to customize the desktop.
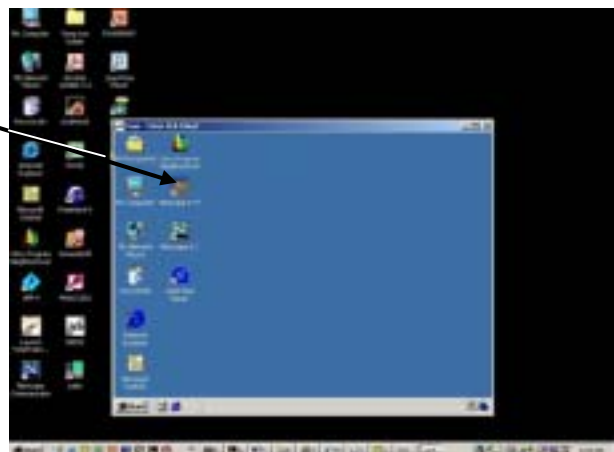
Limited Programs

From the **Start** Button on the Citrix desktop, select **Programs**.

The programs available are what the Citrix session provides. This is not the same as what you have on your telecommuting or office computer.

Advantage:
        a. Faster than running the program from your office computer
        b. Will save to your Data folder located on the Network Attached Storage (SAN) server.

Log on and off a Citrix session

3 methods to start the log on process

First method: NFuse

NFuse is a web interface for accessing a Citrix published application. It requires a plug-in available for download on the Citrix Server. Systems that do not already have this plug-in installed will see a Warning Notice on the Citrix Nfuse Message Center screen, as well as a link to download and install the file.

The easiest way is to use Citrix Nfuse is through your web browser at the following link: https://citrix.niehs.nih.gov/. (Warning: you can not press a back arrow to return here once you are on the NFuse page). Once you go there you will see the following: .

1. NFuse Login Page will appear, enter your username, password, and domain (Domain is **NIEHS**)

2. After your successful login, the following screen will appear (screens may vary upon user privileges)

3. If you click on "**Citrix Applications**" you will be presented with following screen (Screens may vary upon user privileges)

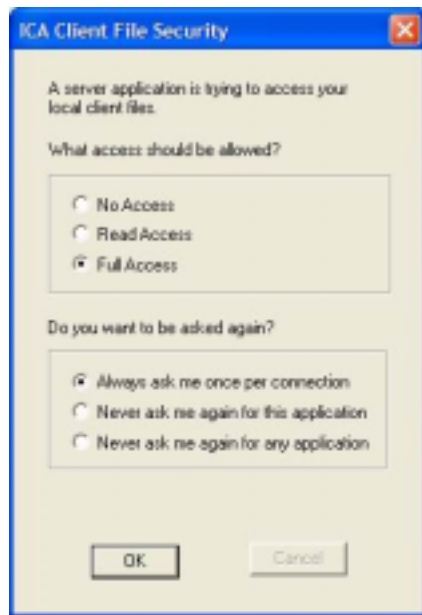4. If you open the "**Citrix Desktop**" folder you will see following screen (Screens may vary upon user privileges)
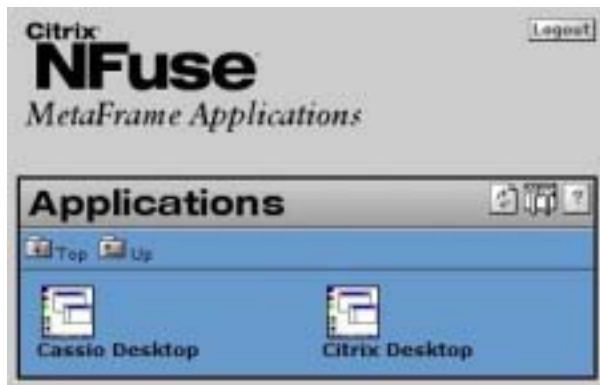
5. Click on "**Citrix Desktop**" and a new window will open and you will be logged into the Citrix Desktop. Click "**Ok**" to continue.

6. The "**ICA File Security**" Window will appear. Select "**Full Access**" and "**Always ask me once per connection**" and press "**Ok**".

ICA Client File Security

A server application is trying to access your local client files.

What access should be allowed?

- No Access
- Read Access
- Full Access

Do you want to be asked again?

- Always ask me once per connection
- Never ask me again for this application
- Never ask me again for any application

[OK]   [Cancel]

From the Citrix Desktop you can access Outlook, Office, web browsers and other programs. The Outlook profile will need to be set up the first time you use it.

Second method: Desktop icon

Locate the desktop icon that launches your Citrix session.

NIEHS   NIEHS Citrix

Double click icon

Third method: Programs

Select the [Start] button, choose **Programs**, slide over and select **Citrix ICS Client** and **Citrix Program Neighborhood**

Windows 2000 Professional

- Programs
  - Accessories
  - Adobe
  - FileMaker Pro 4.1
  - Microsoft Project
  - Citrix ICA Client
    - Citrix Program Neighborhood
    - ICA Client Help
    - Remove ICA Client
  - Timbuktu Pro
- Documents
- Settings
- Search
- Help
- Run...
- Shut Down...

Start

6
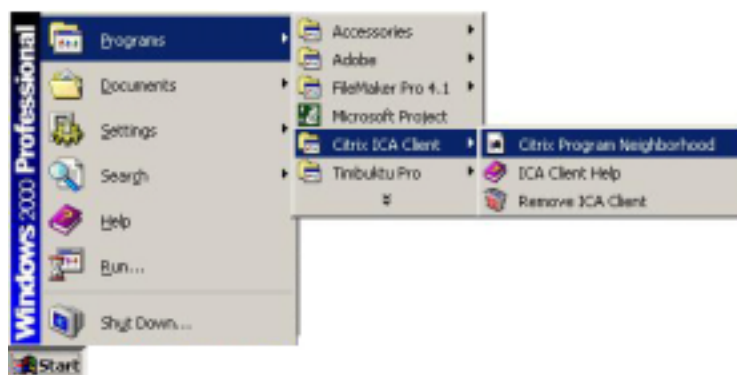
Log on process starts

1. At this point, a window appears indicating that your computer is connecting.

2. After a few moments the Citrix window will appear containing the Notice to Users message.
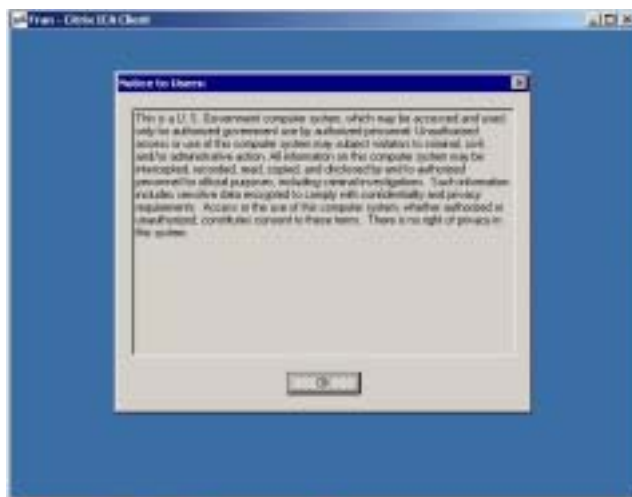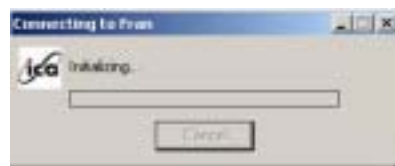
3. Read the message and click OK.

4. Now the Sign-in window will appear.

   a. Fill in **Username** (same as email)

   b. Fill in **password** (same as email)

   c. The domain is **NIEHS**

5. When all information is present press OK.

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Windows Telecommuting

The Citrix desktop now appears
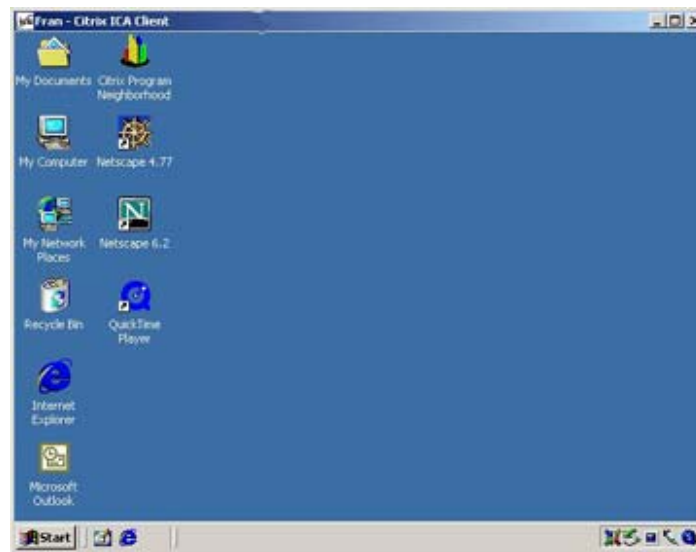
| NOTE: | The Citrix desktop is **NOT** the office computer's desktop. It will not look like the desktop you are used to seeing. This is normal. For more information on this desktop see above on page 1 |

Now that the Citrix desktop is open there are some necessary skills for using the environment.

Make sure you have all the information you need for your specific situation. See checklist in Appendix A.

Locating files on your Telecommuting computer

1. Double click on the My Computer icon.

2. The window that opens displays the drives on your telecommuting computer
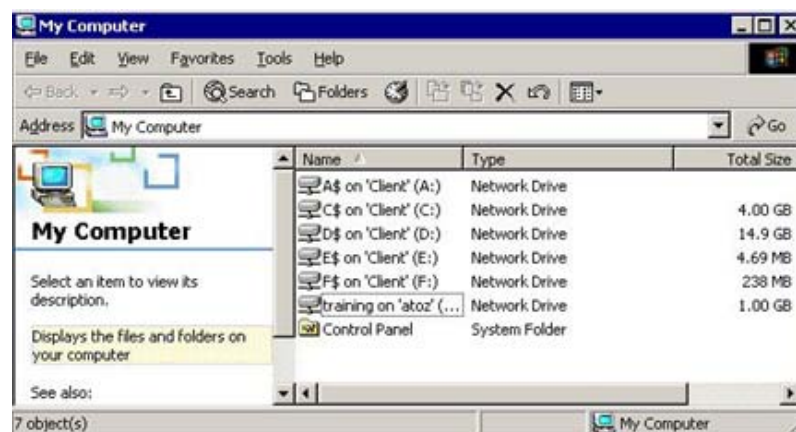
3. The drives correlate directly to the drive letters on your telecommuting computer.

   The **A** drive (floppy drive) on your computer will be the **A$ on 'Client''(A:)** on the Citrix **My Computer** window.

4. Double click on a drive to open and look for a file

5. You use your normal method of navigation to locate the file.

Locating Files on your Office Computer

Share a Folder

Before you can access a folder on your office computer's hard drive, you must share it.
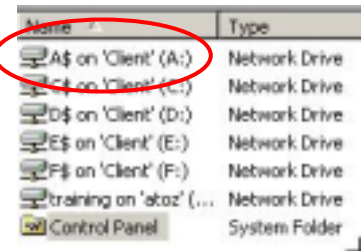
Note: You may ask your CSP for assistance in sharing a folder.

1. Using **Window Explorer** or double clicking on **My Computer** locate the folder you wish to share.

2. **Right click** on the chosen folder.

3. At the bottom of the menu that appears, choose **Properties**

4. In the **Properties** window select the **Sharing** tab

5. Activate sharing by selecting the **Share this Folder** button.

6. Change the share name if needed. Note share name on check list; see Appendix A.

7. Choose the **Permissions** button

8. On the **Permissions** window choose **ADD**.

9. At the top of the **Select Users or Groups window**, Click on the black triangle to the right of the **Look in:** field and select **NIEHS**.

10. Locate and select the name of the person you wish to give access to the folder.

11. Click the **Add** button.

12. Repeat for each person.

13. When finished adding press **OK**

14. The **Permission** window reappears with the individuals you have added listed in the top section.

15. Select them and decide the level of permission they will be granted.

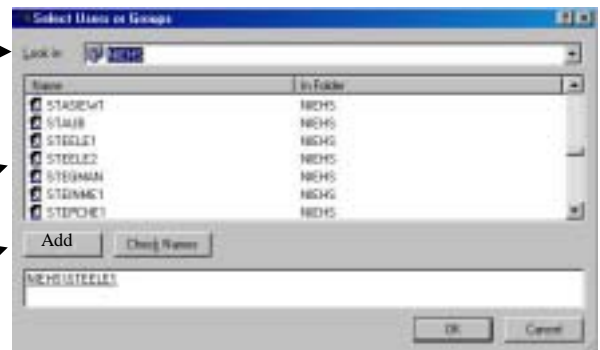|	
Full Control	Read, write, create and delete
Change	Read and write
Read	Can't make changes

16. When finished assigning permissions, click **OK**

17. Click **OK** again.

18. Now the folder icon will have a hand holding it, signifying it is a shared folder

Locate Files on Office computer

There are two methods to locate a file: one quick and one long

Quick Method

To use this method you must know the address of your computer. See Appendix A

1. From the **Citrix Desktop** click on the start button.

2. Slide up and choose **RUN**.

3. This brings up the Run Window

4. Type in the address of the folder you wish to see.

The address is composed of two parts

I. **\\server name** or **\\computer name**
    In the figure to the right **dirpcsvr** is
    the name of the server

II. **\folder on server**
    In the figure to the right **\macpc** is a
    folder on the server and **\training** is
    a folder inside of the **macpc** folder.
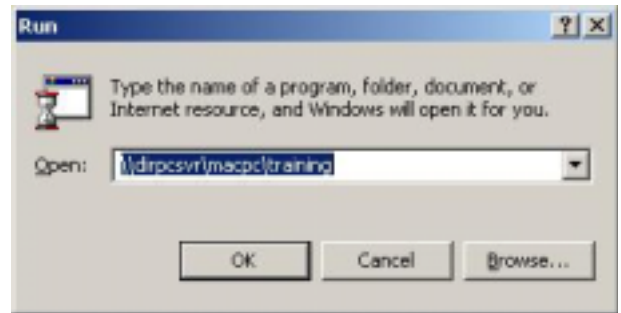
5. Click **OK** to retrieve the folder or file

The long method (used if you don't remember the proper address)

1. Double click on the **Network Places**

    icon.
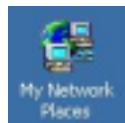
2. In the next window double click **Entire
    Network**
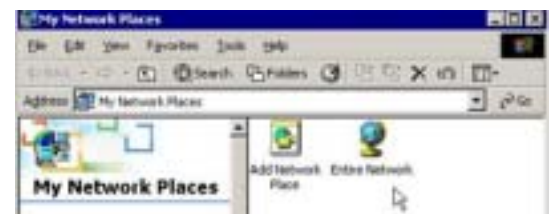
Windows Telecommuting

If at any time a window appears and doesn't show any icons. Look to the left section of the window and click on the **entire contents** choice to view the icons
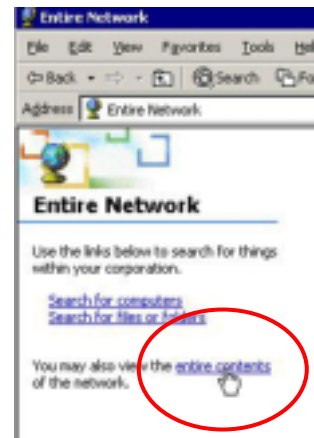
3. In the **Entire Network** window open the **Microsoft Windows Network.**

4. The next window will show all the available Groups on the network.

5. Choose the group that contains the computer you want.

The next window will show all the individual computers available in that group.
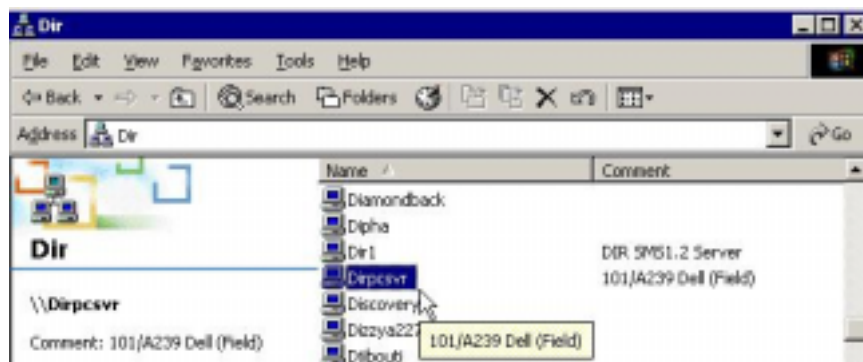
6. Scroll down and double click on the computer you want to open.

7. Once inside the computer, use your normal method of navigation to locate the file.

Transfer files between office/telecommuting computers.

There are two methods for transferring files.

Method 1: transfer the file to a floppy, zip, Jaz, CD-R, etc. Manually carry it from one computer to another

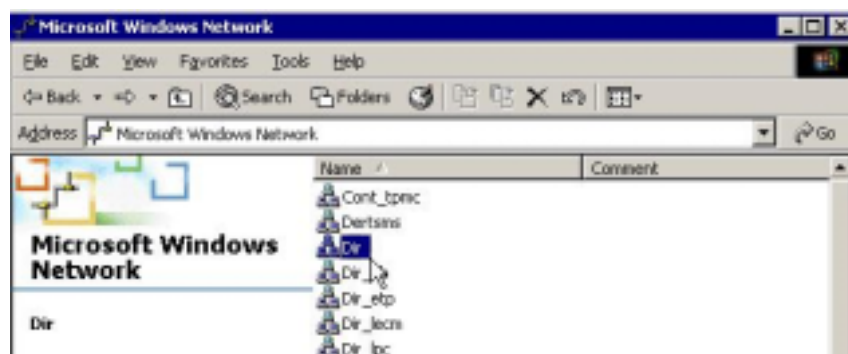**Method 2:** **Copy** from office computer to telecommuting computer directly or vice-versa.

1. See instructions for locating a file or folder on the telecommuting computer above on page 8.

2. Once the window displays the desired file or folder, leave it aside and locate the file or folder on your office computer.

3. See instructions for locating a file or folder on the office computer above on page 9.

4. With both windows open (telecommuting and office computer) you are free to drag and drop files and folders.

Printing a Document

Print at present location

In the Citrix session, the default printer of the computer you are using will become the default printer.

Within all applications on Citrix, use the regular method for printing.
The print window will show you all the printers that you have available on the computer you are presently using.

Print at office

Connecting to a printer in the office from the telecommuting computer

1. You need to know the name of the target printer (see Appendix A)

2. From the **Start** button in lower left of screen, choose **RUN**

3. In the **RUN** window type **\\Heti\printername**

4. Click **OK**

5. Follow the prompts for installing the printer driver.

When completed the new printer will be available from any Citrix application.

Timbuktu Pro

Timbuktu Pro Objectives:
The telecommuter will be able to:

- Open Timbuk2 and connect to target computer
- Access programs that are on the office computer
- Open and transfer file between computers
- Connect to office printer

Open Timbuktu Pro

Method 1:

1. Double click the desktop short cut.

Windows

Method 2

Windows:

1. From the **Start** button in lower left, select **Programs**, **Timbuktu Pro**, **Timbuktu Pro**.

Open Connection

After starting the program, the main window will appear

Windows:

Address Book:
Contains the connection profile
for the office computer

1. **Double click** the connection
   that you wish to activate.
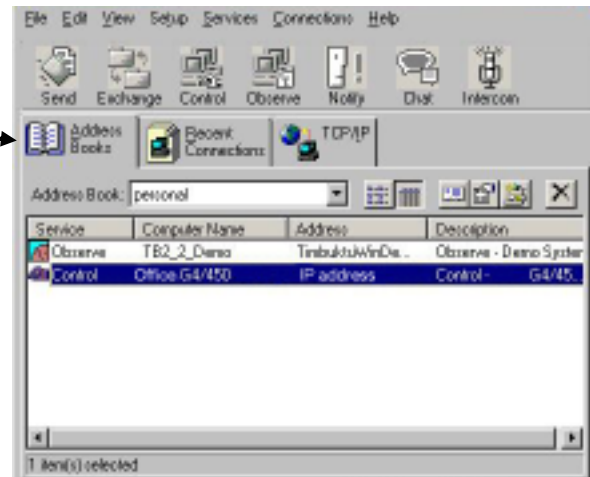
The log on window

The log on window will appear. This window determines how you will connect
with the target computer

Decide which method: **Ask Permission** or **Trusted**.

Ask Permission
If you choose **Ask Permission**, you must wait for the person at the target
computer to give you permission to access the computer
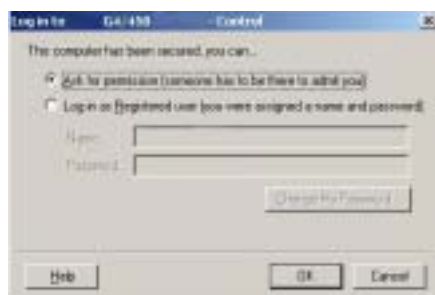
Windows

While waiting you will see a window similar to this:
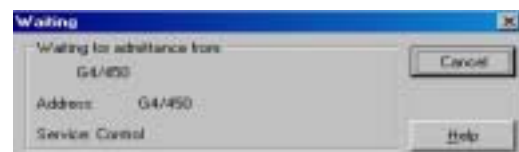
Timbuktu Desktop

Windows

Once the target computer allows access, the **Timbuktu desktop window** appears.

Trusted/Registered user

For the trusted choice you will be asked for a **user name** and **password**.

Windows

Once you have accessed the machine, a window will appear showing the **Timbuktu desktop** of the target machine.

Timbuktu Desktop

Windows

Within this new desktop you can operate the office computer (target computer) the same way you operate it when physically at the office

Actions available with Timbuktu Pro

Action buttons

The following actions are activated by buttons: **control**, **look** and **exchange**.

Win: Action buttons along top of program window

How much access?

Control   allows you to move the cursor and perform regular actions on the office computer

Look   allows you to see everything on the Office computer, but you cannot perform any action.

Exchange   Transfer files from one computer to another.

1. **Navigate** to find the file(s) and folder(s).

2. **Drag** the files from one window to the other to **copy**.
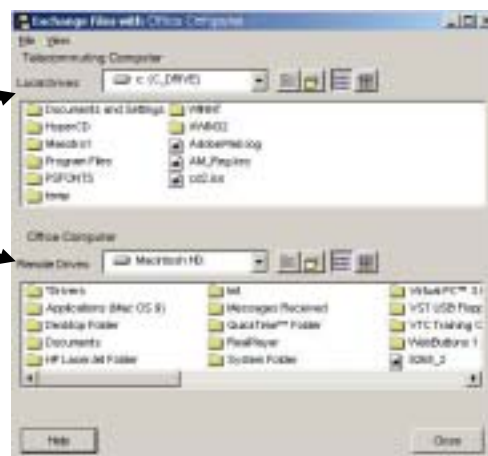
Windows

Printing.

Print document from within the Timbuktu desktop exactly as you would if you were in the office. The chosen printer at the office prints the document.

You can change the printer choice using the usual method within the Timbuktu desktop.

VPN

Virtual Private Network

Connect using VPN

Step 1: Launch the VPN client.
This should be an icon on your desktop. Contact your CSP if the icon is not present.
The VPN client can also be found by going to the **START** menu and choosing **ALL PROGRAMS**.

Step 2: The Connect window will appear. It should be configured to NIEHS.
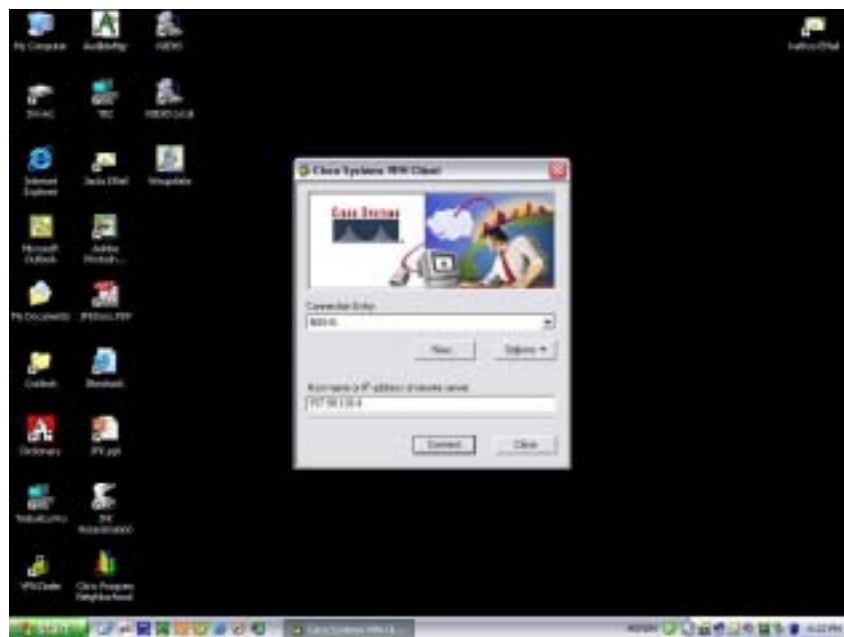
Press **Connect**.

Step3: The Connecting Status window will appear

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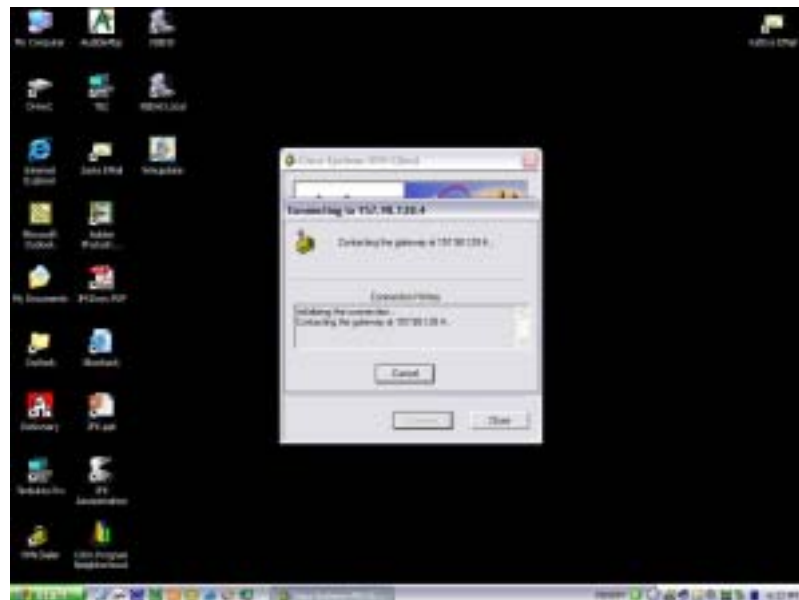
Step 4: Log In window. Use your regular **User ID** and **Password**
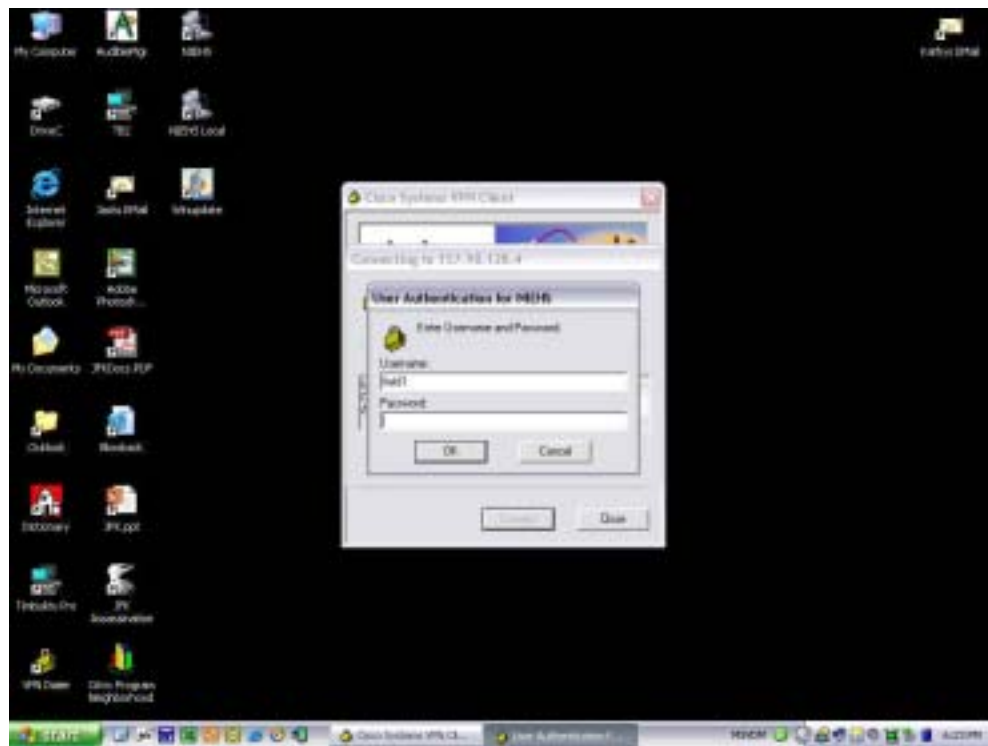
Click **OK**

Step 5: The Warning window appears.
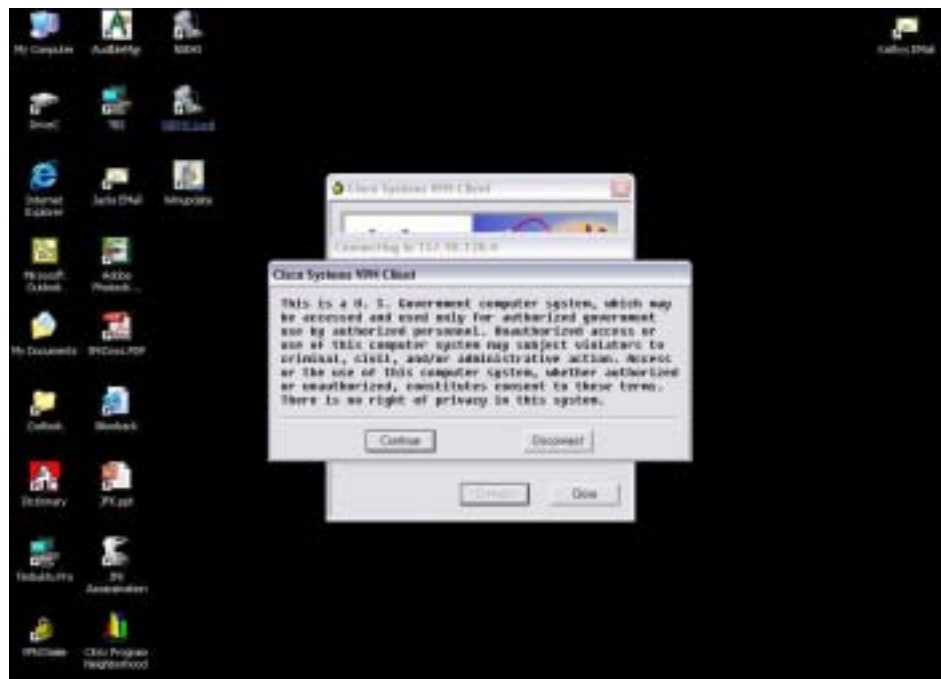
Click **Continue**

Step 6: You are now connected to the NIEHS network. Use your
computer as if you were physically at the institute.
Check **Status** or **Disconnect**: You can use the VPN icon in the system
tray in the lower right
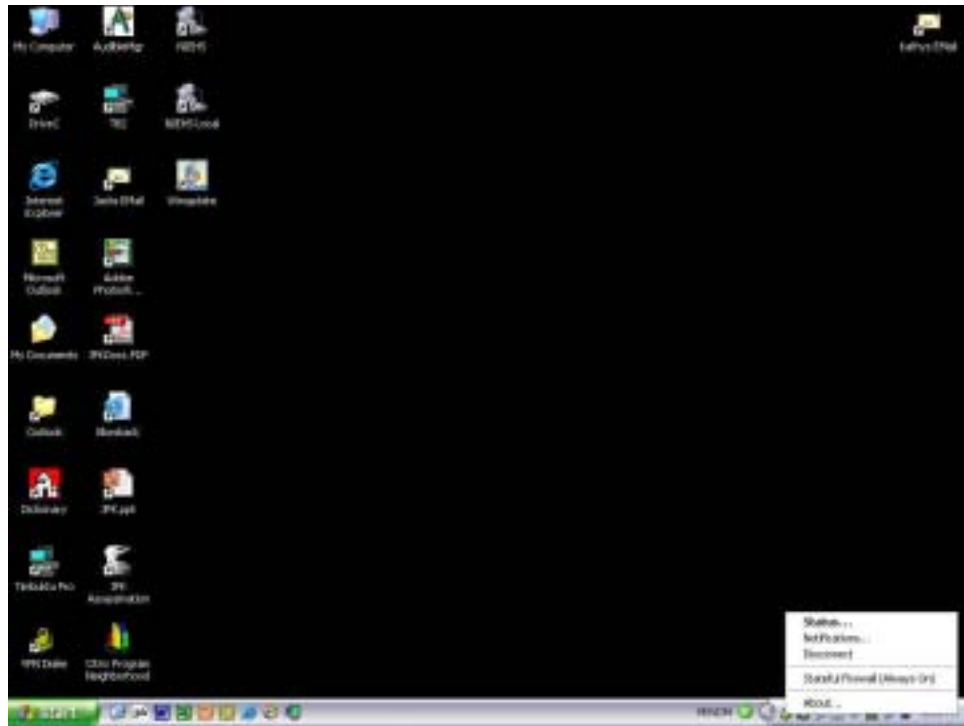
Macintosh Telecommuting

NIEHS Desktop support offers some Telecommuting information at this URL:
http://www.niehs.nih.gov/lsp/userguid/telecom/mac/home.htm

Timbuktu Pro

Timbuktu Pro Objectives:

The telecommuter will be able to:

- Open Timbuk2 and connect to target computer
- Access programs that are on the office computer
- Open and transfer file between computers
- Connect to office printer

Open Timbuktu Pro

Method 1:

1. Double click the desktop short cut.

Macintosh

Method 2

1. From the Apple icon in upper left select **Timbuktu Pro.**

Open Connection

After starting the program, the main window will appear

> **Note:** If the **New Connection** window is not visible, from the **File** menu choose
> **New Connection**.

1. Activate the **Address Books** tab.

2. Select the **Personal Address Book**

3. Click **Open**.

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This opens the Personal Address Book

4. **Double click** on the connection profile you wish to open.

The log on window

The log on window will appear. This window determines how you will connect with the target computer

Decide which method: **Ask Permission** or **Trusted**.

Ask Permission
If you choose **Ask Permission**, you must wait for the person at the target computer to give you permission to access the computer
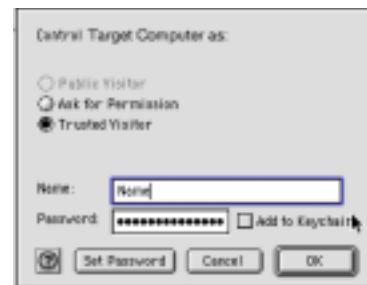
Macintosh

While waiting you will see a window similar to this:
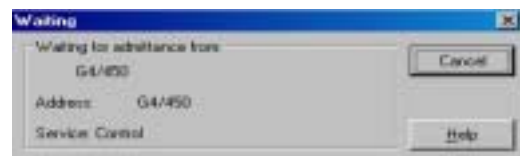
Once the target computer allows access, the **Timbuktu desktop window** appears.

Timbuktu Desktop
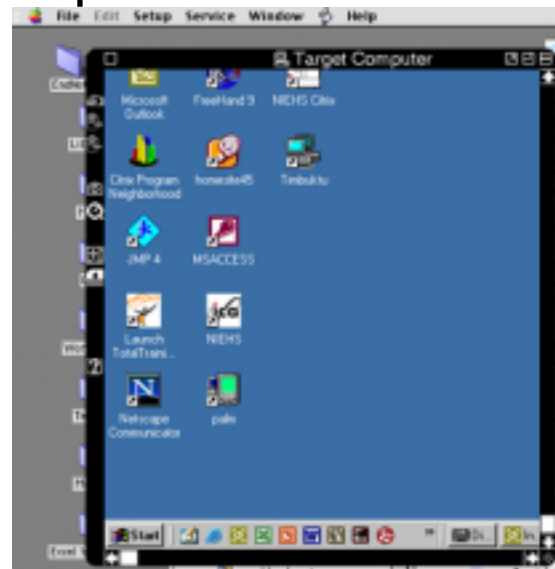
Macintosh

Trusted/Registered user

For the trusted choice you will be asked for a **user name** and **password**.

Macintosh

Once you have accessed the machine, a window will appear showing the **Timbuktu desktop** of the target machine.
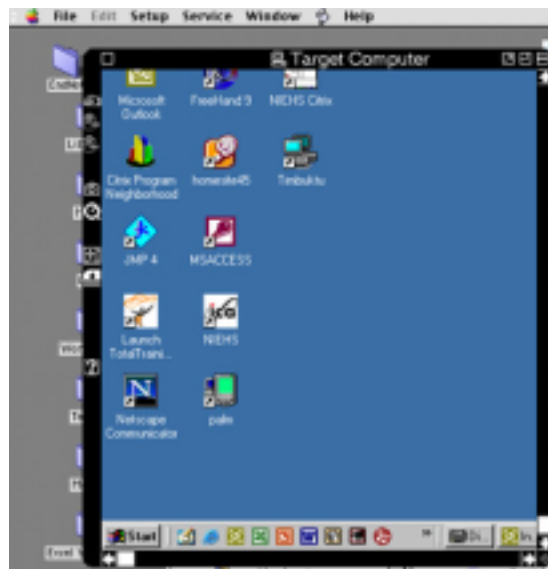
Timbuktu Desktop

Macintosh

Within this new desktop you can operate the office computer (target computer)
the same way you operate it when physically at the office

Macintosh Telecommuting

Actions available with Timbuktu Pro

Action buttons
The following actions are activated by buttons: **control**, **look** and **exchange**.
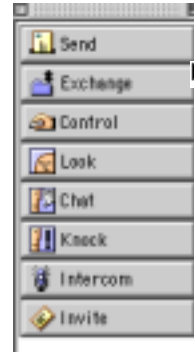
Mac: Action buttons located on separate toolbar, either vertical (as pictured) or horizontal

Macintosh

> **Note: Macintosh** users, if the buttons are not visible, from the **Windows** menu choose **Show Button Bar.**

How much access?

Control   allows you to move the cursor and perform regular actions on the office computer

Look   allows you to see everything on the Office computer, but you cannot perform any action.

Exchange Transfer files from one computer to another.
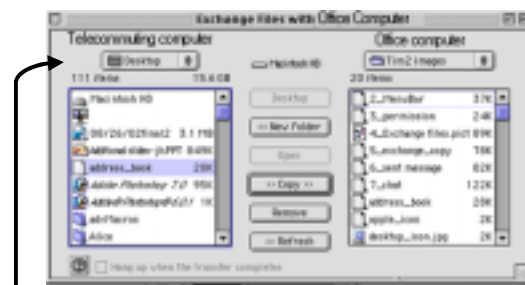
1. **Navigate** to find the file(s) and folder(s).

2. **Select** the file in either window and click **Copy**

Macintosh

Macintosh only: Buttons available on desktop window.
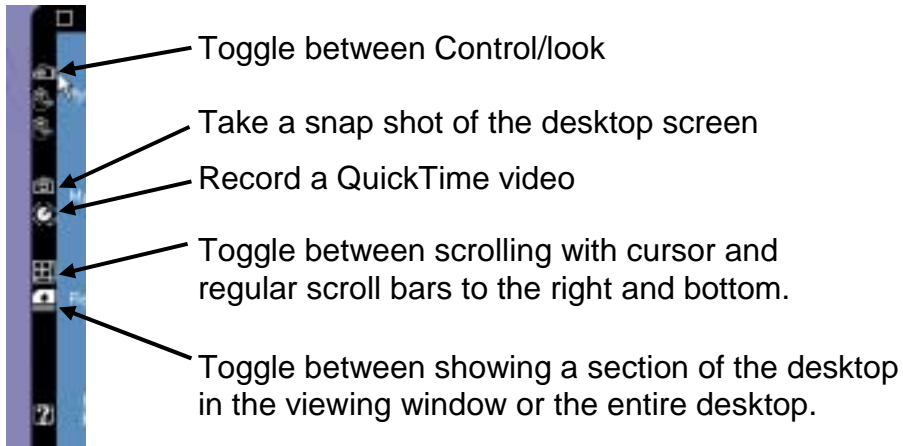
Toggle between Control/look

Take a snap shot of the desktop screen

Record a QuickTime video

Toggle between scrolling with cursor and
regular scroll bars to the right and bottom.

Toggle between showing a section of the desktop
in the viewing window or the entire desktop.

Printing.

Print document from within the Timbuktu desktop exactly as you would if you
were in the office. The chosen printer at the office prints the document.

You can change the printer choice using the usual method within the Timbuktu
desktop.

Macintosh Telecommuting

Using Netlock VPN

This section shows you how to connect your Macintosh from a network connection outside of NIEHS into the NIEHS network. Once a VPN connection is made, you will have the same access to NIEHS network services that you have on campus.

Note: Using Netlock VPN software requires an active network connection. If you use a dial-up connection or other non-continuous network connection, you must start the connection before launching the Netlock VPN Client. You also need Remote Access Approval to connect to the NIEHS network from outside.

Starting a VPN session

1. Click on the Netlock icon near the right end of the menubar at the top of the screen. Choose **Netlock Cisco Client** from the menu that drops down from it. (There is a similar icon in your Control Strip - use either one.)

- or -
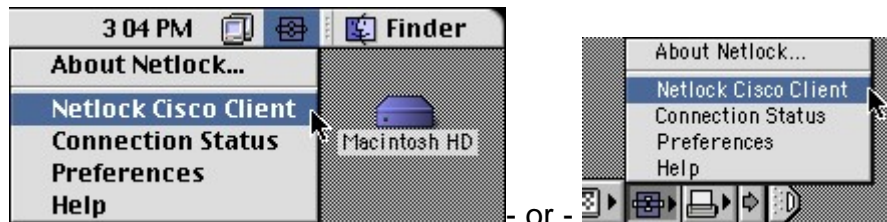
This will launch your default web browser (Internet Explorer or Netscape). Netlock VPN uses the web browser for all its controls.

Note: If you get an error message and the Netlock client page does not appear, it may be because you have firewall software installed on your Mac that is blocking communication with the VPN server. You need to disable this software or preferably configure it so that is does not block port 9161.

2. When the Netlock VPN Client for Cisco page appears, click on the **Connect** button.

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3. The Netlock software will connect to the NIEHS Cisco VPN server...
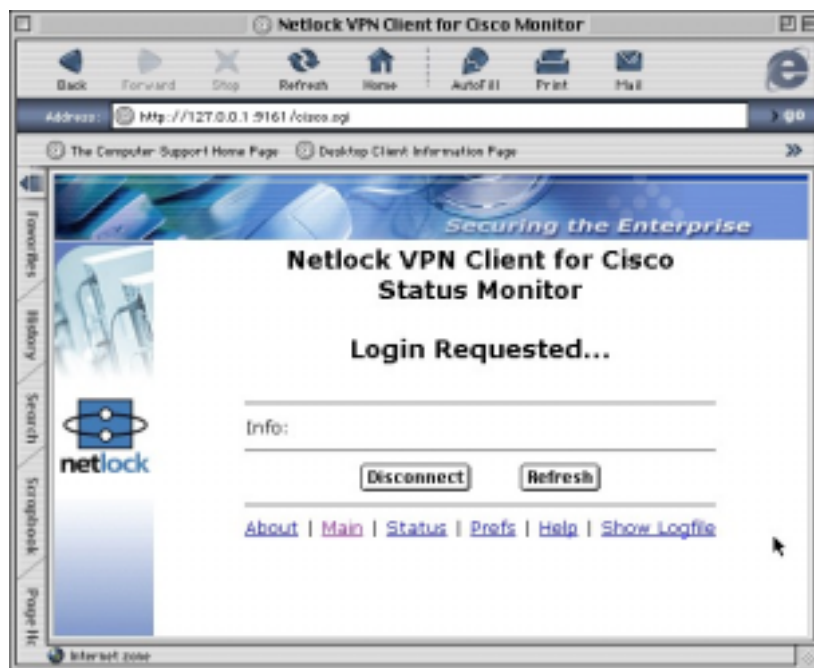
4. ...and display a User Authentication page. Enter your NIEHS **Username** and **Password**, then click on the **OK** button. (Your password must be entered in the correct case.)
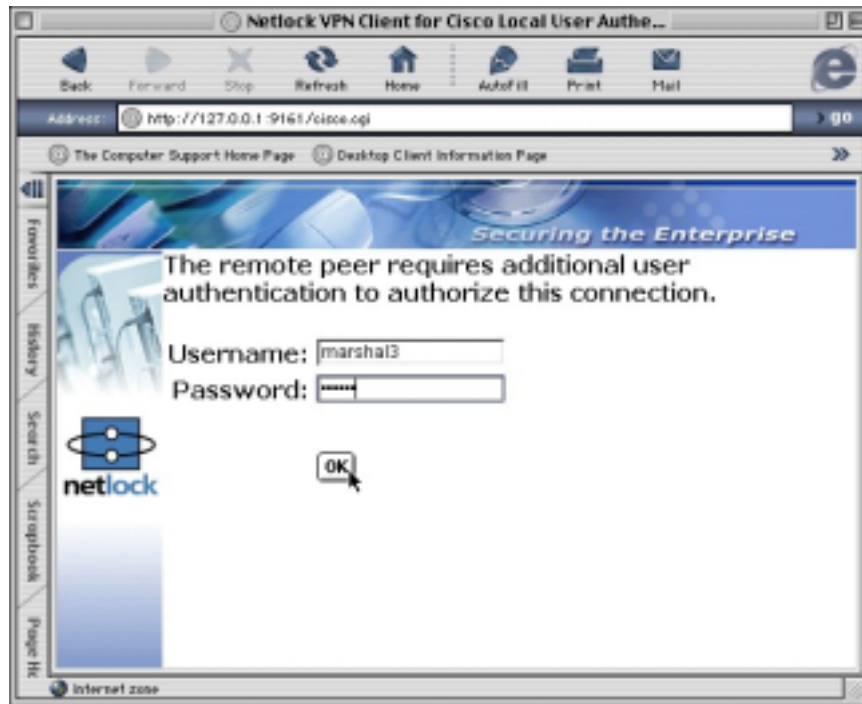
5. A Negotiation in Progress page appears while your password is being checked. If authentication is successful, a small notification window is displayed telling you that a secure session has been established.

The browser window will also change to show the Netlock VPN Client for Cisco Monitor page. This window confirms that your VPN connection is active and shows some information about the connection. Most of this informaton will be of no interest to you, but at some point you may want to know your virtual IP address. This is the NIEHS address your Mac is using during the VPN session. You will receive a new address for each session.
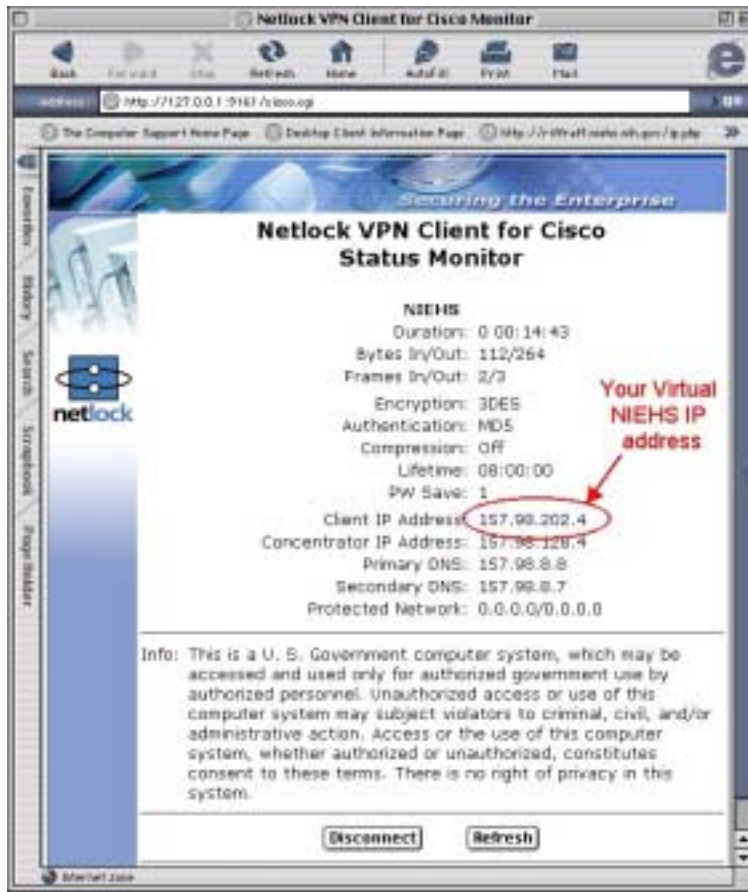
Now that a VPN session is active, your Mac is effectively part of the NIEHS network and you have the same access to NIEHS network services that you have with your on-campus Mac. The VPN session will remain active until you disconnect it or until it has been idle for at least one hour.

A side effect of being part of the NIEHS network is that you may lose access to services on your own local network. If you use TCP/IP networking to connect to a local printer, file server, or other service, you won't be able to use it while you are logged onto VPN unless that service is accessible from NIEHS. This is really the "flip side" of the problem that VPN solves. To regain access to local network services, you will need to disconnect from VPN. Please note that this will not affect printers, hard drives, scanners, etc., that are connected via USB or FireWire.

There's no need to leave the Netlock VPN Client Monitor page displayed. You can close the web browser window or use it to visit other web sites as you would normally do. You can get back to the Netlock window any time from the Netlock menu.

Disconnecting the VPN session

1. When you are ready to end your VPN session, just click on the Netlock menu as you did in before and choose **Netlock Cisco Client**. The Netlock VPN Client for Cisco Monitor page will appear again in the web browser window. Click the **Disconnect** button.
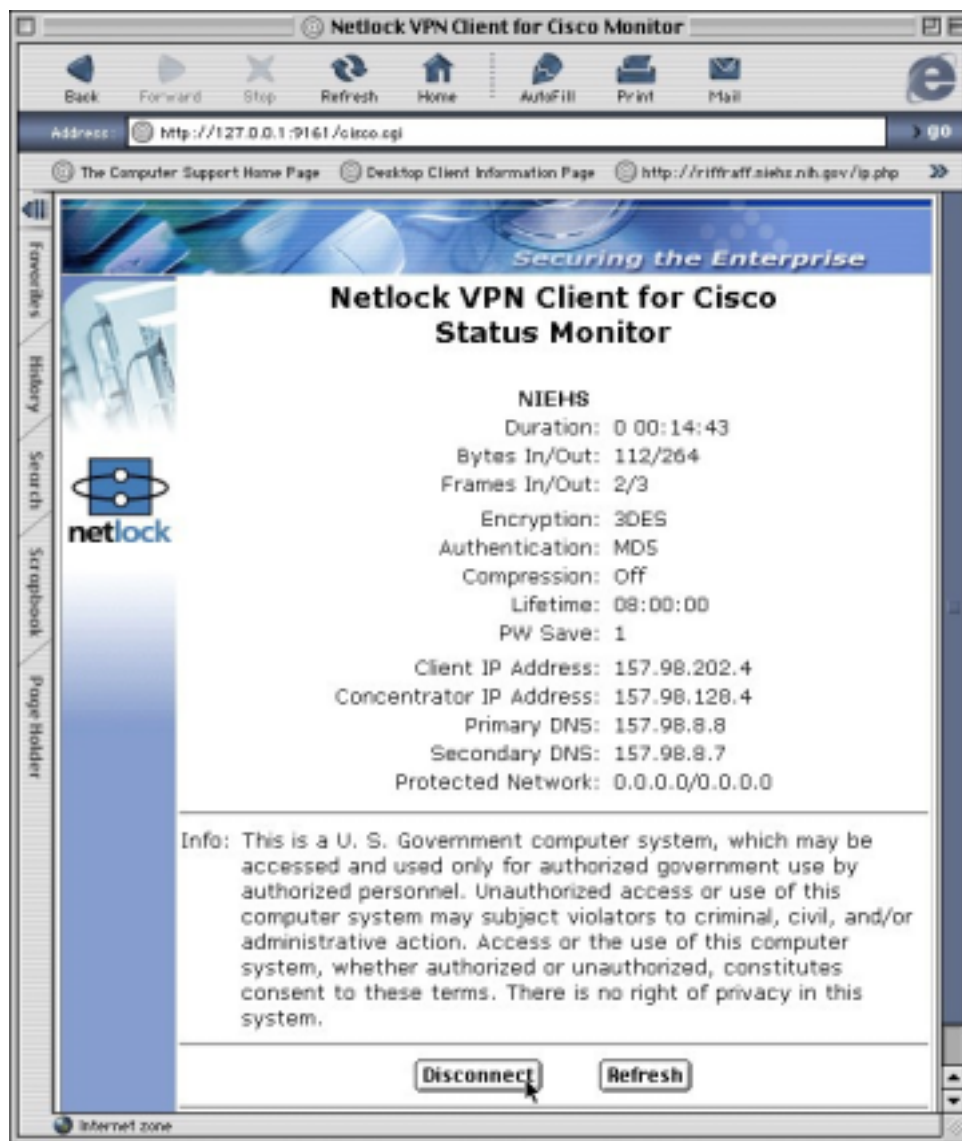
2. When the session has disconnected, a small notification window is displayed telling you that the Security Association has been deleted. That's another way of saying the session has ended.
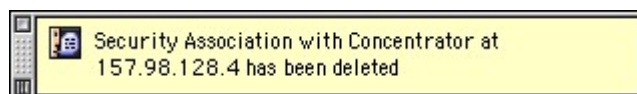
Changing the VPN Group Password

You may at some point be notified that the VPN Group Password has changed. To learn how to change this in your configuration, see <u>Changing the VPN Group Password</u>.

A special warning about using Outlook

You can use Microsoft Outlook with VPN, but you must remember to follow these two rules:

- Always start Outlook **after** beginning the VPN session.
- Always quit Outlook **before** ending the VPN session.

The reason for this is that Outlook needs to be connected to the Exchange server full time, and it will hang the Mac if it loses this connection. Since Outlook uses the VPN IP address, ending the VPN session breaks Outlook's connection, and your Mac will freeze.

Citrix Objectives

The telecommuter will be able to:

- Log on and off a Citrix session
- Navigate the Network Neighborhood to locate your office computer or a server
- Navigate and identify drives, files and documents on your office computer or server
- Use the standard programs included in the Citrix environment to locate, open, modify, create or save a file.
- Transfer files between the office PC and telecommuting PC
- Print a document to the local computer

What is a Citrix Session?

We begin with a physical separation between two computers

Telecommuting   **Office**
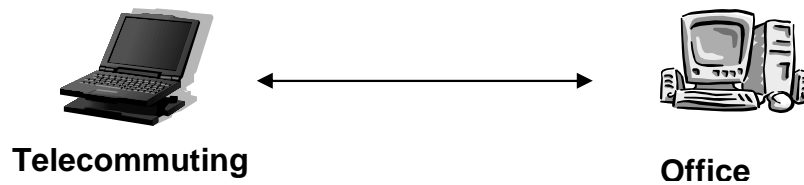
Problem:

d. Slow
e. Must work with separate versions of document on each computer
f. No advantage of central storage.

Solution:
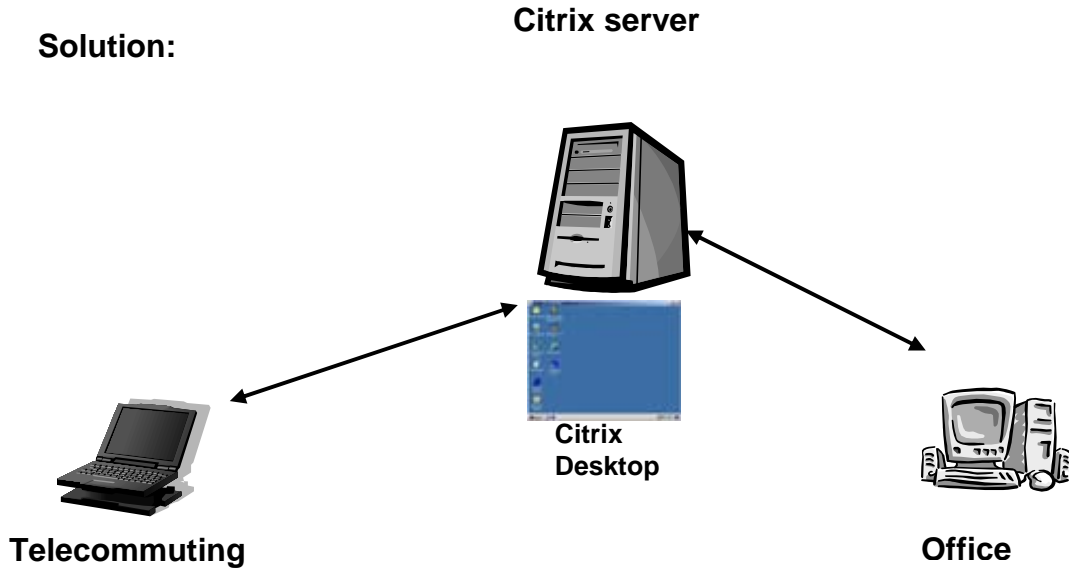
Citrix server

Citrix Desktop

Telecommuting

Office

The Citrix Server has its own **desktop** it will assign to you.

When you log on from either location the Citrix server will show you this desktop.

Citrix server

Citrix Desktop

Telecommuting

Office

Here is an example of what a Citrix session looks like.

The **Citrix Window** appears on your desktop.

The Citrix server creates this desktop. It is not your office computer nor is it the telecommuting computer

This Citrix server remembers you and allows you to customize the desktop.

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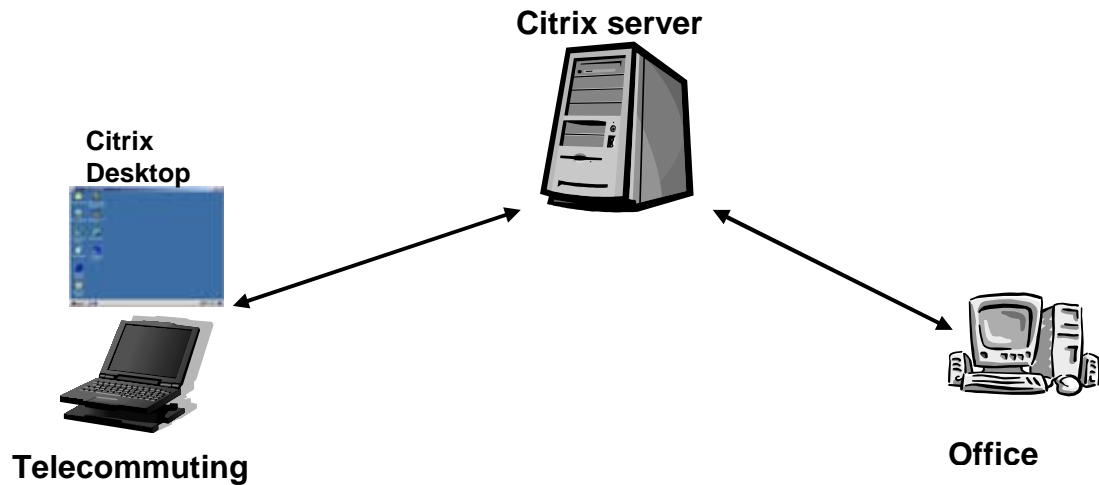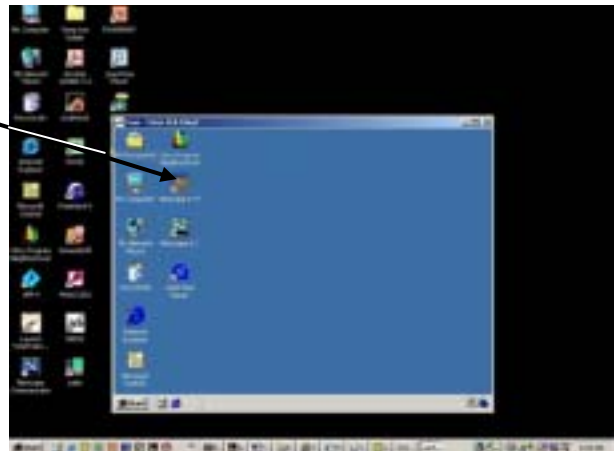
Limited Programs

The programs available are what the Citrix session provides. This is not the same as what you have on your telecommuting or office computer.

Advantage:
> When telecommuting it is faster than running the program directly from your office computer

Log on and off a Citrix session

Making the connection

1. Establish a connection to the Internet.

2. Locate and open the **Connection files** folder that you dragged to the Mac's desktop. This folder contains several connection files that have been preconfigured to connect to NIEHS or NIH services.

3. Start by connecting to the Citrix Desktop. Double click on the file named **Citrix Desktop - fullscreen**. This connects to the Citrix server at NIEHS and displays a Windows desktop. You may receive a message from Norton AntiVirus as the Citrix software writes a temporary file to the hard drive. This is normal. Click the **Remember** button and expect to see these messages when you use Citrix.

4. When the Citrix window opens, the first thing you see as the desktop comes up is the standard security Notice to Users. Click the **OK** button to continue.

5. Next, you see a Windows log on window. Enter your NIEHS User name and Password in the fields provided. Remember that your password must be entered in the correct case.

Once you have logged on successfully, the Windows desktop appears. This is "your" desktop in the sense that settings you make, bookmarks or favorites you save, etc., while you are logged in will be available again the next time you log in. It does not, however, use any settings from your Macintosh.

Window sizes

The preceding instructions had you launch the **Citrix Desktop - fullscreen**. The "fullscreen" indicates that the Citrix window use your full Macintosh screen. To get back to your Macintosh desktop, you can hold down the **Control** and **Option** keys to make the Mac menu bar visible, then choose **Finder** or another application from the **Application** menu.

If your Mac's screen is large enough, you may find it more convenient to use the **Citrix Desktop - 800x600**. As it's name implies, this gives you a Citrix window that's 800 pixels wide and 600 pixels high. If your's Mac's monitor is set to a higher resolution than 800x600, such as 832x624 or 1024x768, etc., you can use the **Citrix Desktop - 800x600** connection file. This will make the Citrix desktop appear in it's own separate window. You can find your Mac's monitor setting by opening the Monitors control panel.

Mouse buttons and Key mapping in Citrix

Using a Windows desktop occasionally requires a right mouse button or some keys that you don't have on your Mac keyboard. Citrix provides a way to get around this.

- To generate a right mouse button or "right click", hold down the **Option** key and click the mouse or, just press the **=** (equals) key above the numeric keypad.
  To generate an **Alt** key, press the Mac's **Command** key.
- To generate an **Insert** key, press the **0** (zero) key on the numeric keypad (num lock must be OFF for this to work). Note that most Macintosh

keyboards don't show you whether num lock is on or off, so you may have to guess. Num lock will be OFF when you begin a Citrix session.

Getting your Email

You can run Outlook inside the Citrix window to access your NIEHS email account. This is very similar to using Outlook on your Mac at work except that you won't have access to your personal folders. This is because personal folders are stored on your Mac's hard drive while your Inbox, Calendar, Contacts, etc., are stored on the Exchange server.

1. To start Outlook, double click on the **Microsoft Outlook** icon on the Citrix desktop. As Outlook opens, you may see a **User Name** window that asks for your name and initials. You should enter your full name here, not your user ID, and your initials. Click the **OK** button when you're finished.

This is used in the Microsoft Office registration for Outlook as well as Word, Excel, etc. You should only have to enter this information the first time you use Outlook.

2. The Outlook window opens. Its appearance and operation are very similar to Outlook on the Macintosh. To exit Outlook, click the "X" icon in the upper right corner of the Outlook window or click on Outlook's **File** menu and choose **Exit and Log Off**.
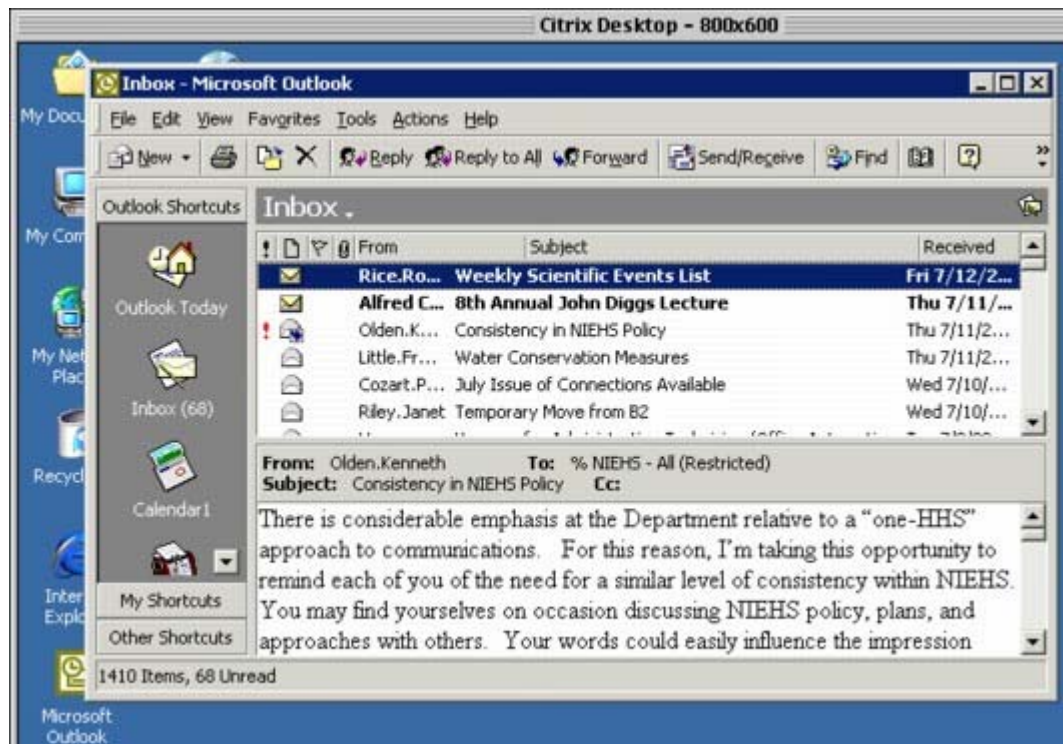
Accessing and Saving files

1. In the Citrix Desktop window, double click on **My Computer**. This shows all the mapped drives in your Citrix session. to provide access back to your Macintosh, Citrix maps the **A:**, **B:**, **C:** drives to your Mac's Floppy drive, CD or DVD drive, and Hard Drive, respectively.

2. Inside the My Computer window, double click on **C$ on 'client' (C:)**. This opens a window displaying the contents of your Mac's startup Hard Drive. You will probably find this the most useful of the mapped drives.

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You can use the C: drive to open files directly from your Mac Hard Drive in applications you use in the Citrix session and you can also save files from applications in Citrix back to your Hard Drive.

Since the Citrix session functions like any other Windows PC logged into the NIEHS network, you can also use **My Network Places** to access NIEHS file servers such as Catoe or the DIRPCSVR.

What you **can't** do is access files directly from your Macintosh at NIEHS. To get around this, you can bring files home on a removeable drive or save them to a Windows file server like Catoe or the DIRPCSVR so you can get to them from Citrix.

Quitting a Citrix session

1. When you are ready to leave a Citrix session, click on the Start menu in the bottom left corner of the Citrix window and choose **Shut Down**.
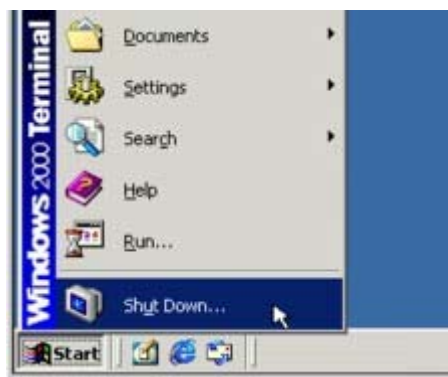
2. A window named **Shut Down Windows** appears. In the field labeled "What do you want the computer to do?" you should see **Log off (userid)**. If you don't, click on the drop-down menu at the right end of the field and choose **Log off (userid)**, then click the **OK** button to quit the session.
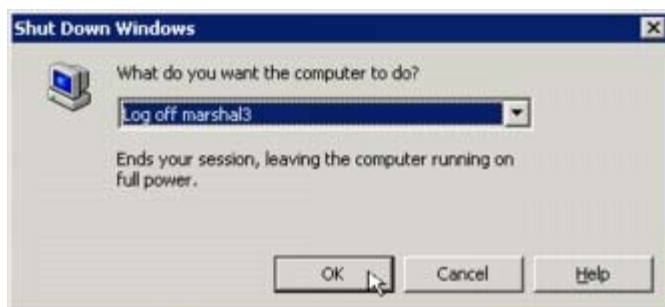
Note that a Citrix session will automatically shutdown if it is left idle for more than 30 minutes.

Printing a Document

Print at present location

In the Citrix session, the default printer of the computer you are using will become the default printer.

Within all applications on Citrix, use the regular method for printing.
The print window will show you all the printers that you have available on the computer you are presently using.
For this to work properly, you must have a PostScript printer. Most laser printers meet this requirement, but most inkjet printers do not and will not print properly from Citrix

Appendix A

Check list for Telecommuting

☐   Have Citrix and/or Timbuktu installed and configured on your telecommuting and office computer

☐   Name of Office Computer _____

☐   Path to Office Computer on Network _____

☐   What to type in RUN window to reach office machine _____

☐   Name of Telecommuting computer _____

☐   Identify the drives on your Telecommuting computer. (you may leave some blank)

    A: __Floppy Drive_____   C: __Hard drive_____

    D: _____   E: _____

    F: _____   G: _____

    U: _____   Other: _____

☐   Name of server(s) used _____

                                      _____

                                      _____

☐   Location of server(s) used _____

                                      _____

                                      _____

☐   Is File and Printer sharing enabled?

☐   Is the folder shared?

☐   Name of shared folder _____

☐   Network printer names _____

                                        _____

                                        _____

☐   Complete list of important URL's